

What is claimed is:

1. A control system of a machine tool comprising:

a machine tool having a plurality of control axes for carrying out machining of a workpiece;

5 a computerized numerical controller carrying out numerical control of each of a plurality of the control axes of the machine tool according to an operation program;

a programmable logic controller carrying out control of the machine tool according to the operation program;

10 a measuring unit measuring states of the workpiece under machining by the machine tool; and

a display unit displaying at least one selected from details of control by the computerized numerical controller, details of control by the programmable logic controller, and details of measurement by the measuring unit.

15 2. The control system of a machine tool as claimed in claim 1 further comprising sampling and displaying means for simultaneously sampling the details from each of the computerized numerical controller, the programmable logic controller, and the measuring unit at a fixed rate, and making the display unit display the sampled details.

20 3. The control system of a machine tool as claimed in claim 1 further comprising sampling and displaying means for simultaneously sampling the details from each of the computerized numerical controller, the programmable logic controller, and the measuring unit with a timing based on the operation program of the computerized numerical controller, and making the display unit display the sampled details.

25 4. The control system of a machine tool as claimed in claim 1 further comprising sampling and displaying means for simultaneously sampling the details from each of the computerized numerical controller, the programmable logic controller, and the measuring unit with a timing based on a state of operation of the machine tool, and making the display unit display the sampled details.

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5. The control system of a machine tool as claimed in claim 4 wherein the programmable logic controller has detecting means for detecting the state of operation of the machine tool and makes a judgment about the state of operation of the machine tool on the basis of the result of the detection of the detecting means, and the sampling and displaying means makes setting of the timing for sampling the details from each of the computerized numerical controller, the programmable logic controller, and the measuring unit on the basis of the state of operation of the machine tool judged by the programmable logic controller.

6. The control system of a machine tool as claimed in any one of claims 1 to 5 further comprising an input unit for selecting and indicating the details to be displayed on the display unit.